

IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently amended) An x-ray tube comprising:
a vacuum housing;
a stationary cathode disposed in said vacuum housing;
an axle fixedly attached to said vacuum housing and proceeding through an interior of said vacuum housing;
a ring projection fixed to said axle, and having an outer surface;
a rotating anode formed by a hollow body surrounding said axle and having an interior, having an inner surface, in which said ring projection is disposed with a gap existing between said inner surface of said interior of said hollow body and said outer surface of said ring projection; and
a liquid metal film filling said gap forming with said gap a liquid-metal fluid bearing for said rotating anode, allowing rotation of said hollow body around said axle.
2. (Original) An x-ray tube as claimed in claim 1 wherein said hollow body has body walls disposed adjacent said axle, and wherein said gap filled with said liquid metal continues between said body walls and said axle.
3. (Original) An x-ray tube as claimed in claim 2 comprising at least one sleeve connected to one of said body walls and concentrically surrounding said axle with a radial spacing from said axle.
4. (Original) An x-ray tube as claimed in claim 3 wherein said gap filled with said liquid metal continues into said radial spacing between said at least one sleeve and said axle.

5. (Original) An x-ray tube as claimed in claim 3 comprising a stator mounted at an exterior of said vacuum housing, and wherein said sleeve forms a rotor, said stator and said rotor interacting to form an electromotor for driving said rotating anode.

6. (Original) An x-ray tube as claimed in claim 1 wherein said hollow body is annular and has a substantially U-shaped cross section.

7. (Original) An x-ray tube as claimed in claim 1 wherein said axle passes completely through said rotating anode.

8. (Original) An x-ray tube as claimed in claim 1 further comprising a channel for coolant proceeding in said axle and in said ring projection.

9. (Original) An x-ray tube as claimed in claim 8 wherein said channel in said ring projection is disposed next to said outer surface of said ring projection.

10. (Original) An x-ray tube as claimed in claim 8 wherein said channel in said ring projection comprises a plurality of branched sub-channels.